"In essentials, unity; in doubtful matters, liberty; in all things, charity." Augustine or RUPERTUS MELDENIUS

**Where do we agree as a baseline**

* *God originated everything (all space, time and matter) supernaturally*
* *God created the material universe (and our world) in incremental steps over a period of time (six literal days or six “ages”)*
* *God was actively involved in the creation of all life (life is not the result of an unguided natural process)*
* *God prepared everything in the universe as a home for mankind, the last of his creation*
* *God created the first humans in his “image”*
* *God’s relationship to his creation is accurately described in the Bible*
* *No pointing fingers*

**Motivation—**

* God is not Dead
* Young Adults leaving the Church
* What the Research Shows
  + Studies indicate that 59-70% of young people who regularly attend church during their teen years will drop out of organized religion at least during part of their early adult life.2 There is debate over how many of these young people will permanently leave the church and how many will return later in life.3 Although some of their disengagement relates to intellectual questions (including questions about science), much of it is probably tied to transitions related to school and work and lifestyle choices.
  + Despite their lack of church attendance, most of these “disengaged” young people still consider themselves Christians.4 However, a significant subset of the “disengaged” go beyond dropping out of church and stop identifying themselves as Christians altogether. For a substantial number of these young people, science appears to play an important role in their decision to leave the faith.
  + Among the growing number of Americans who describe themselves as unaffiliated with any particular faith, nearly a third (32%) believe that “[m]odern science proves religion is superstition,” while nearly a quarter (23-24%) identify this belief as an “important reason” they became unaffiliated. The percentages are even higher for those raised as mainline Protestants: 39% of those currently unaffiliated who grew up as mainline Protestants now believe that “[m]odern science proves religion is superstition,” and 31% identify this belief as an “important reason” they became unaffiliated.5
  + Behind these statistics are people like Kyle Simpson. Raised as a devout Christian, the twenty-something Kyle now no longer believes in God, although he says he wants to believe.6 Scientific claims played a key role in his change of mind. Interviewed by National Public Radio as part of a larger story on young people who leave their faith, Kyle explained:



, **but they’re also not being taught to intelligently examine the views of the skeptics who will inevitably challenge their faith**. Most of these students are not prepared to enter the college classroom where more than half of all college professors view Christians with hostility and take every opportunity to belittle them and their faith.  
There’s no question that a key factor in whether young people remain resolute in their Christian faith or walk away from it is the influence of their parents. It’s as the Proverb says, “Train a child in the way he should go, and when he is old he will not turn from it” ([Proverbs 22:6](http://biblia.com/bible/esv/Prov%2022.6)). One particular study found that when both parents were faithful and active in the church, 93 percent of their children remained faithful. When just one parent was faithful, 73 percent of their children remained faithful. When neither parent was particularly active, only 53 percent of their children stayed faithful. In those instances where both parents were not active at all and only attended church now and then, the percentage dropped to a mere 6 percent.  
“We’ve failed to recognize that what we win them with . . . we win them to.” Christian parents and our churches need to do a better job of developing the hearts and minds of our youth with the Word of God ([1 Peter 3:15](http://biblia.com/bible/esv/1%20Pet%203.15);[2 Corinthians 10:5](http://biblia.com/bible/esv/2%20Cor%2010.5)).

**Goal-** provide an apologetic framework for students entering the public domain of education with tools, resources, and evidences of Biblical truth agreeing with the record of nature—dual revelation

* Employ the tools of apologetics and the scientific method and underlying Models
* Investigate as the Bereans
* The greatest test of the quality of our preaching is whether or not it brings everyone to judgment. When the truth is preached, the Spirit of God brings each person face to face with God Himself.

**Curriculum** —a Scientific presentation of God’s Truth from the written word—BIBLE, and the record of nature –how they parallel each other and agree.

**: “When something new is revealed about the human genome, I experience a feeling of awe at the realization that humanity now knows something only God knew before.”5**

**Main resource—**

* Reasons to Believe [www.reasons.org](http://www.reasons.org)
* Navigating Genesis
* history of God-Believing Scientists
* Other---other scientists pro and con and the validity of the arguments
  + Gerald Schroeder
  + Dawkins
* RTB schooling resources
* <http://www.reasons.org/education/educators-help-desk/curriculum-options>
* <http://www.reasons.org/education/continuing-education-units/overview>
* [http://www.reasons.org/summary-reasons-believes-testable-creation-model#](http://www.reasons.org/summary-reasons-believes-testable-creation-model)
* The Scientific Method—
  + Galileo and the Roman Catholic church—sun-centered [heliocentric] model of the solar system. [223]
  + Establish a frame of reference for proper interpretation.
  + Test everything
  + Apply proper methodology

**Scientific method**

* + Identify the phenomena to be investigated ***[define the terms]***
  + Identify the frame[s] of reference or point[s]to be used to study the phenomena
  + Determine the initial conditions before the experiment begins
  + Perform and experiment and observe the phenomenon, noting what takes place and in what order
  + Note the final conditions yielded by the experiment or observation of the phenomena
  + Form a tentative explanation or hypothesis for how and things transpired as they did
  + Test the hypothesis with further experiments or observations under similar condition s
  + Revise the phenomena accordingly
  + Determine how well descriptions/explanations of the phenomena integrates with explanations of related phenomena
* To qualify as science there must be some sort of physical evidence to support the claims. To do so there must be testable models…this leads to presumptions sometimes, even by the elite---check facts---
* Show us your model MODEL—schematic description or set of phenomena that accounts for its observed or inferred features It should be flexible (dynamic), self-testing and correcting and lead to research🡪NTQ’s [new thought questions]. What we believe colors everything 🡪 affect behaviors and life plans both philosophically and theologically. The success of a model relies on how well it explains the existing data and how the predictions of future testing hold true as time unfolds.
  + what do we mean
    - explain what we see in the record of nature
  + appeal is an exhortation to develop models…both sides lack a model for the record of creation/nature
  + Scientists don’t know everything!
    - There are flaws and failings. This does not lead to abandonment of a model
    - Build a pathway to eliminate big ones

**5 Successful model factors**

* Detailed
* Continually refined
  + Demonstrate humility that it is not complete
* Show scientists how certain discoveries can prove it wrong or affirmed--testable
* Predictions need, by and large need to be correct
* Identify the cause/designer behind record of nature phenomena
  + RTB Middle and High School Curriculum Framework *Navigating Genesis as the beginning textual source*

**Things to Avoid—**

* Making things fit
  + Design
  + Naturalistically
* Giant leaps

**Questions to pose for dialogue**

Cambrian and Avalon kliff notes

The term “Cambrian Explosion” refers to the appearance and rapid diversification of most major living animal body plans (phyla) in the fossil record within an interval of perhaps 20 million years or less, a relatively short period in evolutionary history. This time is known as the Early Cambrian, and began around 543 million years ago. This time interval is recorded by some spectacular fossil deposits that include superbly preserved fossils of these early animals. Two famous examples are the Burgess Shale in Canada, and the Chengjiang in China.1 Despite the claims of some, the Cambrian was not the beginning of multicellular animal life; the latter has a fossil record that extends back at least 30 million years earlier.2

The Cambrian Explosion is often posed as a challenge for evolution because the sudden burst of change in the fossil record appears to be inconsistent with the more typical gradual pace of evolutionary change. However, although different in certain ways, there are other times of very rapid evolutionary change recorded in the fossil record -- often following times of major extinction. The Cambrian Explosion does present a number of challenging and important questions because it represents the time during which the main branches of the animal tree of life became established. It does not create a challenge to the fundamental correctness of the central thesis of evolution, the descent of all living species from a common ancestor. This important period in the history of life extended over millions of years, plenty of time for the evolution of these new body plans (phyla) to occur. Furthermore, the fossil record provides numerous examples of organisms that appear transitional between living phyla and their common ancestors. The ongoing research about the Cambrian period is an exciting opportunity to advance our understanding of how evolutionary processes work, and the environmental factors shaping them. [or shaping our thoughts to a designers input]

The three successive evolutionary stages are represented by the **Avalon, White Sea, and Nama assemblages** (all named after localities where representative fossils of each stage can be found). The earliest Avalon stage was represented by relatively few species.

Although the phyla of most of these animals appear to have originated before the Cambrian Explosion, it was during this time that they announce themselves in rocks worldwide.

Fossil locales such as Chengjiang and the Burgess Shale show a world of animals hunting and killing and defending themselves with ever-more complicated claws and teeth and eyes and armor. This is different from the soft-bodied world that existed prior to the Cambrian. The world following the Cambrian Explosion is our world.

The Cambrian and Ediacaran explosions present a massive problem for evolution because each records a wide variety of morphologies that come onto the scene practically immediately according to the fossils, with no identifiable ancestors. Darwinian evolution, on the other hand, would expect such widely disparate body plans to emerge only after a long geological history.[6](http://creation.com/ediacaran-explosion" \l "endRef6) No known or accepted mechanism can account for such rapid evolution.

What’s worse is that the Cambrian and Ediacaran explosions bear no relationship at all to one another. Therefore, this sort of ‘evolutionary explosion’ had to happen twice. Once stretches credulity to breaking point—twice blows it out of the water completely.

The sudden appearance of this diverse assemblage of Ediacaran biota, of course, provides no problem for a creationist understanding of the fossils. They are simply another grouping of organisms that were overwhelmed and fossilized by the Flood.[7](http://creation.com/ediacaran-explosion" \l "endRef7),[8](http://creation.com/ediacaran-explosion" \l "endRef8)

Therefore, the major bodyplans of animals all had to evolve very quickly, which is stretching the bounds of plausibility

Darwin reckoned that there should be long and hidden periods of animal evolution before the Cambrian Explosion, Explosions of diversity in the evolution of life were of concern to Charles Darwin, who expected evolution to happen at a constant pace over long periods of time.

, proposing that dramatic environmental changes must have opened up new niches for natural selection to operate upon. These proposals include the runaway glaciation theory,11which proposes that glaciers briefly covered much of the earth, and the resultant loss of habitat created bottlenecks where evolution could act more rapidly. Another theory suggests that a change in atmospheric oxygen led to this sudden burst in evolutionary changes.12 Yet another proposal is that major changes in the seafloor, from algae mat-covered surfaces in the late Precambrian to soft muddy bottoms later in the Cambrian, had dramatic evolutionary and ecological impacts.13

**The fossil record is notoriously incomplete, particularly for small and soft-bodied forms**.

. In fact, the Tree of Life is a metaphore for what is actual a forest of trees. Still, major mysteries are likely to persist, given the amazing ability of nature to splice, dice, reassemble, swap, amplify, and silence or re-use nucleid acid sequences within the genome of living organisms.

Such estimates of ancient divergence times could contain substantial error caused by uncertainty of the molecular clock assumptions, confounding effects of horizontal gene transfer, and errors in estimating sequence homology (i.e., similarlity). Consequently, attempts to date evolutionary branchings with molecular clocks have resulted in widely different estimates among researchers.

The debate persists today about whether the evolutionary "explosion" of the Cambrian was as sudden and spontaneous as it appears in the fossil record. The discovery of new pre-Cambrian and Cambrian fossils help resolve the debate, as these transitional fossil forms support the hypothesis that diversification was well underway before the Cambrian began. More recently, the sequencing of the genomes of thousands of life forms is revealing just how many and what genes and the proteins they encode have been conserved from the Precambrian. The explosion of external form (the phenotype) in the fossil record is what we see now, but more gradual adaptation was taking place at the molecular level (the genotype).

Well, there are firstly two lines of circumstantial or indirect evidence. There is the failure of Darwinian bottom-up explanations of the origin of the types, particularly those patterns or body plans, etc., that appear to be non adaptive. Then there is the failure to provide a convincing explanation of development in terms of a set of instructions in the genes. These are not trivial failures. Insofar as mechanistic bottom-up explanations fail -- and cumulative selection and gene-directed development are bottom-up causal explanations for phylogeny and ontogeny respectively -- then the only available natural causal alternative account of the actualization of life's forms in phylogeny and ontogeny is to postulate the existence of directive forces in nature, that is, laws of form that have executed a designer's plan. the true explanation of a phenomenon is the one that remains, however outré, after all other explanations have been excluded.

Another line of circumstantial evidence, but one that is more positive, arises from the now widely accepted notion that that the cosmic environment is fine-tuned for life as it exists on earth. This environmental fine-tuning is in fact so extraordinary that it suggests almost irresistibly that the laws of nature will also turn out to be fine-tuned for the origin and actualization of the specific forms of life on earth.

**The Stuff We All Agree on When It Comes to Origins**

Now that I’ve written [a book](http://coldcasechristianity.com/cold-case-christianity-by-j-warner-wallace/), I get the chance to speak around the country and talk about how we, as Christians, assemble circumstantial evidence related to the reliability of the Gospels and the [existence of God](http://coldcasechristianity.com/?p=3140). As a result, I meet all kinds of Christians who hold a variety of views related to the Genesis creation account. Many are “Literal Day” creationists, while others lean toward some version of “Gap Theory”, “Day-Age Creation Theory”, “Creation Revelation Theory”, “Progressive Creation Theory”, “Genesis Creation Day Theory” or “Genesis Literary Theory” Creationism. Some believe that the universe is very young, others that it is very old. Some believe that God created everything in the form we see it in today (as the result of some form of “instantaneous” creation); others that God shaped His creation through some process of progressive interaction. When you ask these folks about the Bible, all of them will tell you that they believe the Bible to be the inspired word of God. All will agree that the Bible is the final authority. All will tell you that they believe what the Bible teaches. Christians simply disagree on how to interpret the first book of Moses.

I’m sensitive to the variety of views held by Christians on this matter. I see the reasonable nature of every view; I recognize that each approach to Genesis chapter one has its own virtues and its own liabilities. I’m not discouraged by this reality, but encouraged that there are so many reasonable resolutions. I *am* discouraged, however, when we allow our fallen human nature to get the best of us. Rather than finding areas of agreement, most of us choose to divide over areas of divergence. Regardless of your position related to the Genesis account, I’d like to point out the areas where all of us, regardless of creation theory, agree. As Christians, we all affirm the following premises:

*God originated everything (all space, time and matter) supernaturally*

*God created the material universe (and our world) in incremental steps over a period of time (six literal days or six “ages”)*

*God was actively involved in the creation of all life (life is not the result of an unguided natural process)*

*God prepared everything in the universe as a home for mankind, the last of his creation*

*God created the first humans in his “image”*

*God’s relationship to his creation is accurately described in the Bible*

As Christians, we all agree that God exists. He is the creator of the universe and all life within it. While we agree on the aforementioned critical, foundational issues related to God’s creation, we disagree on how long this process took, and precisely how God shaped each object of his creation (did God create everything in the final form we see today, or did God progressively guide his creation over some period of time?). We agree on the big stuff and disagree on the details.

It’s interesting to note that Christians also agree with atheists on a several important premises related to the nature of the universe:

*Everything in the universe (all space, time and matter) came into existence from nothing at a point in the past*

*Life on our planet appeared in incremental steps over a period of time*

*Humans appear later in history relative to the appearance of other animals*

*Humans possess a consciousness that is unique to the animal world*

As Christians, we often think that we disagree with atheists on everything when it comes to the origin of the universe and the origin of life, but that isn’t actually the case. We also tend to think, as Christians, that we ought to agree with one another on everything when it comes to the origin of the universe and the origin of life, but I’m not sure that ought to be the case either. Christians disagree with one another on secondary issues. We disagree with atheists on the most important issue: Does God exist and is He actively involved in the creation of the universe? That happens to be the most significant question we can ask as a culture. The answer shapes everything in our worldview; what we believe about our origin determines largely how we will choose to live our lives.

So it seems to me that Christians have a choice. We can focus on the areas where we disagree with one another (secondary issues related to the amount of time taken and the precise mechanisms used by God), or we can focus on the area where we disagree with an unbelieving world (the foundational issue of God’s existence). I am inclined to begin my discussions with Christians by uniting around our common knowledge related to God’s existence and interaction in the universe, rather than dividing over our points of divergence. At the same time, I am also inclined to begin my conversations with non-believers by pointing out our areas of agreement before I address he most important foundational issue that divides us. It’s easy to forget that we have a lot in common, but these points of agreement ought to unite us as we engage other Christians and inspire us to begin a conversation with unbelievers who need to hear the Gospel.

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<http://coldcasechristianity.com/2013/the-stuff-we-all-agree-on-when-it-comes-to-origins/>

Fuz Rana

1. **Microevolution** refers to changes happening within a species. A textbook example would be the change in wing color of the peppered moth in response to changes in pollution levels in the UK.

2. **Speciation** occurs when one species gives rise to a closely related sister species. Take for example the evolution of the finches on the Galapagos Islands from an ancestral finch species that came to this archipelago from South America. Upon arrival this ancestral finch evolved into a variety of species that vary primarily in body size and in beak size and shape. Both microevolution and speciation have been repeatedly observed in nature and, in my opinion, are noncontroversial.

3. **Macroevolution** refers to putative changes that require that evolutionary processes have genuine creative potential. Examples include humans evolving from a primate ancestor, whales evolving from a terrestrial wolf-like mammal, and birds evolving from theropods. Whether or not macroevolution has occurred defines the creation/intelligent design/evolution controversy. I am skeptical that macroevolution is a real process that shaped life's history. (Go here, here, andhere to read a couple of representative articles that help explain my skepticism.)

4. **Chemical evolution** is another type of evolutionary process I'm skeptical about. This term refers to the processes that presumably generated the initial life-forms. According to this model, chemical selection transformed a complex chemical mixture of simple compounds into protocellular entities that further evolved to yield the first true cells. (I would refer readers to the book I coauthored with Hugh Ross, Origins of Life, for a detailed rationale for my skepticism about chemical evolution.)

5. **Microbial evolution** helps make sense of the evolutionary changes associated with the LTEE, which don't really fit in any of the previous four categories. These types of transformations involve changes in viruses, bacteria, archaea, and single-celled eukaryotes—changes like the acquisition of antibiotic resistance in bacteria, the ability of viruses to hop from one host to another (such as SARSand HIV), and the emergence of drug-resistant strains of the malaria parasites. Microbial evolution would also include horizontal gene transfer between microbes, which accounts for the evolution of pathogenic bacteria from non-pathogenic strains (like E. coli O157:H7). Again, I don't find microbial evolution particularly controversial. A preponderance of evidence exists for it, including the LTEE.

Just because scientists have observed microevolution, speciation, and microbial evolution doesn't mean that macroevolution is necessarily valid. The scale of the biological changes that take place in microevolution and speciation are radically different than those that presumably take place in macroevolution. As is true in other areas of science, processes happening at one level can't automatically be extrapolated to other levels without proper validation. In my opinion, this validation doesn't exist for macroevolutionary changes. As for microbial changes, it is hard to maintain that what is true for viruses and single-celled prokaryotic organisms is valid for complex, multicellular eukaryotes. In fact, many biologists don't even think that the concept of a species applies to bacteria and archaea in the same way it applies to complex, multicellular organisms, if it applies at all.

## From --These Critics of Intelligent Design Agree with Us More Than They Seem to Realize

The universe must have begun with a large amount of active information with respect to the target of birds [and other species]. Conservation of Information only shows that any evolutionary theory is necessarily incomplete and cannot account for the creation of the information that the evolutionary processes limned by the theory supposedly outputs. Darwinian evolution is often presented as though it were a complete explanation of how biological complexity arises. Defenses of Darwinian evolution, in particular those directed at lay audiences, defend the idea that selection, replication, and mutation is all that is necessary to produce complexity. There is very little mention of the type of universe that is necessary for Darwinian evolution to work. If anything, the presumption is that natural selection will work its magic no matter what physics looks like. You must also assume a suitable fitness landscape. You have to appeal to something beyond Darwinism, such as laws or self-organization, to account for a useful fitness landscape. For now, I leave aside the question of whether the explanations so proposed actually produce a fitness landscape good enough for Darwinian evolution to account for biological complexity.

What remains to ask is whether or not any of these explanations of the fitness landscape actually work.

Dembski argues in *No Free Lunch* that any fitness landscape that can account for life would have to be a "finely crafted assemblage." Behe has argued that irreducibly complex structures are almost impossible for Darwinian evolution to produce. Doug Axe has argued that functional proteins are too rare and too different for evolution to evolve. In a variety of ways, intelligent design advocates have argued that fitness landscapes aren't suitable for Darwinian evolution.

**From Aristotle**-- What is the evidence that nature herself is the ultimate directive agency, that a designer's plan was enacted via natural agency?

Well, there are firstly two lines of circumstantial or indirect evidence. There is the failure of Darwinian bottom-up explanations of the origin of the types, particularly those patterns or body plans, etc., that appear to be non adaptive. Then there is the failure to provide a convincing explanation of development in terms of a set of instructions in the genes. These are not trivial failures. Insofar as mechanistic bottom-up explanations fail -- and cumulative selection and gene-directed development are bottom-up causal explanations for phylogeny\* and ontogeny\* respectively -- then the only available natural causal alternative account of the actualization of life's forms in phylogeny and ontogeny is to postulate the existence of directive forces in nature, that is, laws of form that have executed a designer's plan.

Only a paradigm based upon "laws of form" can provide a coherent and consistent explanatory framework for all three.

However, in addition there are more direct lines of evidence. Arising from recent advances in fundamental biological knowledge, this evidence too supports the existence of laws of biological form and the existence of a finite set of definite types as intrinsic natural features of the world order (as, again, with atoms and crystals). To begin with, as has been acknowledged since the early 19th century, the types are *very robust* and have persisted essentially as unchanged patterns or ground plans in diverse lineages for millions of years. Recent developmental studies have revealed additional aspects to this extraordinary robustness, showing that the types are generated during development in extraordinarily diverse ways, utilizing different genes, different gene circuits, different developmental modules, etc. In other words, the same end is achieved by *different means*, as dramatically witnessed, for example, in the different routes/genes/developmental mechanisms involved in the actualization of the insect body plan.

entelechy (plural entelechies) (Aristotelian philosophy) The complete realisation and final form of some potential concept or function; the conditions under which a potential thing becomes actualised.

A particular type of motivation, need for self-determination, and inner strength directing life and growth to become all one is capable of being. It is the need to actualize one’s beliefs. It is having a personal vision and being able to actualize that vision from within.

Something complex that emerges when a large number of simple objects are put together.

<https://en.wikipedia.org/wiki/Ontogeny> Wikipedia

Ontogeny (also ontogenesis or morphogenesis) is the origination and development of an organism, usually from the time of fertilization of the egg to the organism's mature form. Yet, the term can be used to refer to the study of the entirety of an organism's lifespan.

Phylogenetics - Wikipedia, the free encyclopedia https://en.wikipedia.org/wiki/Phylogenetics

branching process may be depicted as a phylogenetic tree, and the place of each of the various organisms on the tree is based on a hypothesis about the sequence in which evolutionary branching events occurred.

Epigenetics - Wikipedia, the free encyclopedia https://en.wikipedia.org/wiki/Epigenetics

In genetics, epigenetics is the study of cellular and physiological trait variations that are not caused by changes in the DNA sequence; in layman's terms, epigenetics is essentially the study of external or environmental factors that turn genes on and off and affect how cells read genes.

**From White Space**

**final end in mind**, and arranged the proper developmental steps appropriately.

Evolutionary biologists disagree. They say this exquisitely refined developmental pathway evolved gradually, a little at a time. All these things happened because of random genetic change and natural selection. No road map, no design was needed. Finally, the series progresses logically, and purely by naturalistic means.

. **The details of how the transitions took place must be supplied,** and their reasonableness assessed.

In fact, in order for development to proceed in any organism, a whole cascade of coordinated genetic and biochemical events is necessary so that cells divide, change shape, migrate, and finally differentiate into many cell types, all in the right sequence at the right time and place. These cascades and the resulting cell divisions, shape changes, etc., are mutually interdependent. Interrupting one disrupts the others. In *C. elegans* changing one cell division can have significant effects on the fates of downstream cells, and the earlier the change, the more downstream effects there will be. ***Coordinated, finely tuned cascades of events that lead to functional organisms cannot be produced by chance and natural selection alone.***

**Biomimicry is an approach to innovation that seeks sustainable solutions to human challenges by emulating nature’s time-tested patterns and strategies.**

* Robots based on the physiology and methods of locomotion of animals
  + [BionicKangaroo](https://en.wikipedia.org/wiki/BionicKangaroo) moves like a kangaroo, saving energy from one jump and transferring it to its next jump[[6]](https://en.wikipedia.org/wiki/Biomimetics#cite_note-6)
  + Climbing robots,[[7]](https://en.wikipedia.org/wiki/Biomimetics#cite_note-7) boots and tape[[8]](https://en.wikipedia.org/wiki/Biomimetics#cite_note-8) [mimicking geckos feet and their ability for adhesive reversal](https://en.wikipedia.org/wiki/Synthetic_setae)
* [Nanotechnology surfaces](https://en.wikipedia.org/wiki/Sharklet_(material)) that recreate properties of [shark skin](https://en.wikipedia.org/wiki/Dermal_denticle#Placoid_scales)[[9]](https://en.wikipedia.org/wiki/Biomimetics#cite_note-9)
* Treads on tires[[10]](https://en.wikipedia.org/wiki/Biomimetics#cite_note-10) inspired by the toe pads of [tree frogs](https://en.wikipedia.org/wiki/Tree_frog)
* Self-sharpening teeth found on many animals, copied to make better cutting tools[[11]](https://en.wikipedia.org/wiki/Biomimetics#cite_note-11)
* [Protein folding](https://en.wikipedia.org/wiki/Protein_folding) used to control material formation for [self-assembled functional nanostructures](https://en.wikipedia.org/wiki/Molecular_self-assembly)[[12]](https://en.wikipedia.org/wiki/Biomimetics#cite_note-12)
* The [light refracting properties of butterfly wings](https://en.wikipedia.org/wiki/Structural_coloration) are harnessed to provide [improved digital displays](https://en.wikipedia.org/wiki/Interferometric_modulator_display) and everlasting colour[[13]](https://en.wikipedia.org/wiki/Biomimetics#cite_note-13)
* Better ceramics by copying the properties of seashells[[14]](https://en.wikipedia.org/wiki/Biomimetics#cite_note-14)
* Polar bear fur inspired thermal collectors and clothing[[15]](https://en.wikipedia.org/wiki/Biomimetics#cite_note-15)
* Mimicking the [arrangement of leaves on a plant](https://en.wikipedia.org/wiki/Phyllotaxy) for better solar power collection[[16]](https://en.wikipedia.org/wiki/Biomimetics#cite_note-16)
* Studying the light refractive properties of the moth's eye to produce less reflective solar panels[[17]](https://en.wikipedia.org/wiki/Biomimetics#cite_note-17)
* [Self-healing materials](https://en.wikipedia.org/wiki/Self-healing_material), [polymers](https://en.wikipedia.org/wiki/Polymer) and [composite materials](https://en.wikipedia.org/wiki/Composite_material) capable of mending cracks[[18]](https://en.wikipedia.org/wiki/Biomimetics#cite_note-18)

|  |  |  |
| --- | --- | --- |
| Why | Audience | Hurdles |
| Common questions  --Where did we come from? How did we get here?  --What happens when I die?  --what is my purpose?  -- | Middle and High School students in Sunday schools  Science teachers with a Christian mindset  Those students with a scientific bent and a respectively skeptical viewpoint of the culture  Build on the current state of affairs that believing students attend—the public school system and science classes promoting evolution as fact and not theory under investigation.  What other theories should be investigated [creationism, etc.  -evolution needs to be defined, there are sublayers [Fuz Rana]  Begin where we agree  -Physics of the universe is harmonic, consistent, free of contradiction, beautiful, elegant (11)  -the bible matches the record of nature better than man has been able to explain    Positions  Naturalist  Evolutionist  Gap Theory (33)-Bernard Ramm  YEC  OEC  Models (16-19)  -Separatist—science and religion are mutually exclusive  -Conflict—science deals with facts and reality, religion makes existence claims  Complementary- there is overlap i.e. the universe had a beginning  -Constructive Integration—Concordism—both the Bible and record of nature are trustworthy, both domains are content rich. Conflict does arise, | What do we agree on?   * bacteria at the beginning * common ancestors * humans interpreting the evidence * viewpoint/reference point of the writers--relativity |
| Students leave school unprepared and ill-equipped for the next level when faced with non-believing professors | Sharing and dialogue with Old-Earth [OEC] and Young-Earth Creationists [YEC] |
| The large drop-off and drop-out levels of believers in the respective age groups | Logistics of just teaching on Sundays or during the week too |
| Create a critical mass of prepared believers to lovingly present God’s story in the culture backed by the science that agrees with Scripture | Red lights to avoid in the dialogue  Burden of proof   |  | | --- | | Define-Hebrew terms (26) and appendix   * Evidentialism * Evolution   Fideism | |
| Provide Salt-light and armor for believing students | What format-forum to teach with and to i.e.  Video--lecture—discussion—homework… |
| Develop the dual revelation of our Creator in an Apologetic forum—share the Truth with Love from a scientific vantage point | |  | | --- | |  | |  | |
| Responsible to report and interpret | 8 evidences??? |
| \* Everything came into existence from nothing  \* Life on our planes appeared in incremental stages  \* Humans appear later in history relative to other species  \* Humans possess a consciousness that is unique in the animal world  http://coldcasechristianity.com/2013/the-stuff-we-all-agree-on-when-it-comes-to-origins | Michael Shermer—Skeptics Society  Richard Dawkins-Daniel Dennett, Sam Harris—new atheists |
|  | Humans interpreting the evidence (20) |